



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

217/524-3300

March 16, 2011

CERTIFIED MAIL

7009 3410 0002 3807 6451
7009 3410 0002 3807 6468

WRB Refining LLC Wood River Refinery
Attn: Eric Petersen
900 South Central Avenue
P.O. Box 76
Roxana, Illinois 62084

Shell Oil Products US
Attn: Kevin Dyer
17 Junction Drive
PMB #399
Glen Carbon, Illinois 62304

Re: 1191150002—Madison County
WRB Refining LLC
ILD 080 012 305
Log No. C-868-M-3
Received: December 8, 2010
RCRA Closure

Dear Mr. Petersen and Mr. Dyer:

This letter is in response to the Closure Sampling Report prepared and submitted on your behalf by Robert Billman of URS Corporation on December 7, 2010. This report presented soil sampling analytical results associated with the RCRA closure of a former interim status hazardous waste surface impoundment at the above-referenced facility, referred to as Pond 2. A RCRA interim status closure plan for Pond 2 was approved by the Illinois EPA on December 2, 2009; modifications to this plan were approved by Illinois EPA on April 26, 2010.

The subject submittal was handled as a closure plan modification request and is hereby approved subject to the following conditions and modifications:

1. Based upon a review of the subject submittal, Illinois EPA has determined that closure of the soils within Pond 2 will be considered complete (and thus no further action will be necessary) provided:
 - a. The sediments and six inches of underlying clay associated with the inlet ditch of Pond 2 are removed.
 - b. The asphalt liner of Pond 2 is properly maintained as an engineered barrier in accordance with 35 Ill. Adm. Code 742.
 - c. The property is only used for industrial and commercial purposes in the future.

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760

Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131

Bureau of Land — Peoria • 7620 N. University St., Peoria, IL 61614 • (309) 693-5462

Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 W. Harrison St., Des Plaines, IL 60016 • (847) 294-4000

Peoria • 5415 N. University St., Peoria, IL 61614 • (309) 693-5463

Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800

Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

- d. A site safety plan to address possible work exposure to the soil remaining beneath Pond 2 is developed and implemented during any future excavation/construction in these areas.
 - e. Any soil removed from Pond 2 during future activities is managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
 - f. Groundwater in the vicinity of Pond 2 is not used for potable purposes in the future.
2. A plan to complete closure of Pond 2 relative to groundwater was submitted to Illinois EPA (Log No. C-868-M-1). Until such time as such a plan is approved: (1) a groundwater monitoring, reporting and recordkeeping requirements of 35 Ill. Adm. Code, Part 725, Subpart F, must continue for Pond 2; and (2) the requirements of Condition 5 of Illinois EPA's July 20, 2007 letter must be met.
3. As indicated in Condition 1 above, the sediments and six inches of underlying soil must be removed from the Pond 2 Inlet Ditch. Appropriate vertical control of the sediment and soil removal effort will be sufficient to ensure all contaminated material of concern has been removed from Pond 2. As such, it will be necessary to determine, at least in relative terms, the elevation of the sediment/clay interface before the removal effort begins and the elevation of the remaining clay after the removal effort is completed.
4. Closure efforts at this facility must meet the requirements of 35 Ill. Adm. Code 724, Subpart G. Any variation to the closure activities approved by this letter shall be the subject of a request to modify the approved closure plan which is submitted to Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit(s). In addition, this request must contain information demonstrating that the proposed modifications meet the requirements of 35 Ill. Adm. Code, Subtitle G: Waste Disposal. A revised schedule for completing the various tasks necessary to complete closure must be included in this request.
5. An environmental land use control (ELUC) must be established in accordance with 35 Ill. Adm. Code 742, Subpart J which includes the following information and restrictions:
- a. A statement that contaminated soil is present beneath Pond 2, but does not pose a threat to human health or the environment, provided an engineered barrier (its asphalt liner or equivalent barrier meeting the requirements of 35 Ill. Adm. Code 742) remains over it and the restrictions set forth in the institutional control are met;

- b. A scaled drawing showing the boundaries of the required engineered barrier over the contaminated soil, relative to the property boundaries at the site;
- c. A general description of the construction details of the required engineered barrier in place over the contaminated soil;
- d. A requirement that a site safety plan meeting the requirements of 29 CFR be developed and implemented any time construction/excavation work takes place in the contaminated soil present beneath the engineered barrier. Among other things, this plan must properly restrict worker exposure and any other person's exposure to the contaminated soil;
- e. A requirement that any soil removed from beneath the engineered barrier be managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal;
- f. A requirement that the facility only be used for industrial and commercial activities in the future;
- g. A requirement that the groundwater in the vicinity of Pond 2 not be used for potable purposes.

A draft of this ELUC must be submitted to Illinois EPA for review and approval before it is recorded with the Madison County Recorder.

- 6. 35 Ill. Adm. Code 742.1010(d)(8) requires that an ELUC contain scaled maps which show information about the facility, any remaining contamination at the facility and any physical features at the facility to which the ELUC applies:
 - a. The required scaled maps must specifically show:
 - (1) the legal boundary of the property to which the ELUC applies;
 - (2) the horizontal and vertical extent of contaminants of concern above applicable remediation objectives for soil to which the ELUC applies;
 - (3) any physical features to which an ELUC applies (e.g. engineered barriers, monitoring wells, caps); and
 - (4) The nature, location of the source, and direction of movement of the contaminants of concern.

- b. Exhibit B of the model ELUC developed by Illinois EPA is comprised of the maps necessary to meet the requirements of 35 Ill. Adm. Code 742.1010(d)(8). In developing such an exhibit for an ELUC associated with an engineered barrier or industrial/commercial land use restrictions:
- (1) If only one drawing is used to present all the required information, then it must be clearly labeled as Exhibit B to the ELUC in question. Many times however, it will be necessary to include more than one drawing in Exhibit B to meet the requirements of 35 Ill. Adm. Code 742.1010 (d)(8). In such cases, each map shall be given a unique Exhibit number (i.e. Exhibit B-1, B-2, B-3, etc.) and labeled as such.
 - (2) A cover sheet must be provided for the exhibit which: (a) lists the types of maps that must be provided in the ELUC as required in 35 Ill. Adm. Code 742.1010(d)(8); (b) identifies the map within the exhibit which addresses the individual requirements of 35 Ill. Adm. Code 742.1010(d)(8)(A), (B), (C) and (D); and (c) lists the maps which comprise the exhibit by name and number.
 - (3) The Real Estate Tax Index/Parcel Index Number (PIN) of the property in Question must be contained on each map in Exhibit B.
7. All waste generated as part of this project must be managed in accordance with the requirements of 35 Ill. Adm. Code 721, 722, 723, 728, 808 and 809.
8. All hazardous waste generated during this project is subject to annual reporting as required by 35 Ill. Adm. Code 722.141. A report must be submitted to the Illinois EPA by March 1 of the following year for wastes generated during a calendar year and: (a) treated and left on-site; or (b) shipped off-site for storage, treatment and/or disposal. Additional information and appropriate report forms can be obtained from:
- Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
9. All non-hazardous special waste generated during this project that are shipped to a facility located outside the State of Illinois are subject to annual reporting as required by Section 22.01 of the Illinois Environmental Protection Act and 35 Ill. Adm. Code

809.601(g) and shall be reported to Illinois EPA by February 1 of the following year. Additional information and appropriate report forms can be obtained from:

Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

10. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Cod 725.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of the closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
11. Under the provisions of 29 CFR 1910, cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
12. The form entitled RCRA Interim Status Closure and Post-Closure Care Plans General Form (LPC-PA18) must be completed and accompany all information submitted to the Illinois EPA associated with the closure activities described in this letter. This form can be found on Illinois EPA's internet site. As noted on this form, two copies must accompany the original of all submittals, so that the information submitted can be distributed, as necessary to Illinois EPA and personnel and regional offices.
13. All references to the "Illinois EPA's RCRA closure plan instructions" refer to the document entitled Guidance for Preparing RCRA Closure Plans (July 2003). A copy of this document is available on Illinois EPA's internet site (www.epa.state.il.us).
14. When closure is complete, a certification must be submitted to Illinois EPA by the owner/operator and an independent professional engineer that the hazardous waste management units at the facility have been closed in accordance with the specifications in the approved closure plan. This certification should be received at the Illinois EPA

within sixty (60) days after closure is completed. The form used to make this certification can be found on Illinois EPA's internet site (www.epa.state.il.us). Signatures must meet the requirements of 35 Ill. Adm. Code 702.126.

The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. The Professional Engineering Practice Act (225 Illinois Compiled Statutes 325/1-325/49) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be licensed under the Act. Therefore, any certification or engineering services which are performed for a Closure plan in the State of Illinois must be done by an Illinois P.E.

As part of the closure certification, to document the closure activities at your facility in accordance with 35 Ill. Adm. Code 724.215, a Closure Documentation Report must be developed and submitted to Illinois EPA along with the closure certification statement which includes the following:

- a. Background information about the facility overall and the overall closure project.
- b. A description of the unit(s) closed (include scaled maps showing location of unit(s), identification of wastes managed in the unit(s)).
- c. A chronological discussion of all closure activities and what was accomplished as a result of completing these activities.
- d. The volume of waste, waste residue and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- e. Scaled drawings showing the horizontal and vertical boundaries of the extent of the sediment/soil removal effort in the inlet ditch to Pond 2.
- f. A description of the method of waste handling and transport.
- g. The waste manifest numbers.
- h. Copies of waste manifests.
- i. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the

activities and results associated with the sampling/analysis effort. At a minimum, this information must include:

- (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;
 - (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;
 - (8) visual classification of each soil sample in accordance with ASTM D-2488;
 - (9) a summary of all procedures used for quality assurance/quality control, including the results of these procedures; and
 - (10) a discussion of the data, as it relates to the overall goal of the sampling/analysis effort.
- j. Color photo documentation of closure. Document conditions before, during and after closure.
- k. Information demonstrating that the remediation objectives approved for the project have been achieved, including establishment of any engineered barriers or institutional controls necessary to support these objectives.

Mr. Petersen and Mr. Dyer
C-868-M-3
Page 8

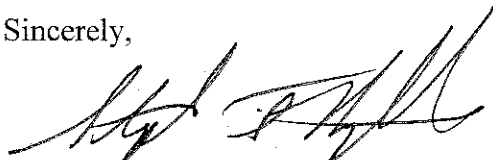
15. Closure of Pond 2 must be carried out in accordance with: (1) 35 Ill. Adm. Code 620, 725 and 742; and (2) Illinois EPA letters regarding such submittals.

Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA. However, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal, or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Act of 1989, the Professional Geologist Licensing Act and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definition of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding this letter, please contact William T. Sinnott, II at 217/524-3310.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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cc: USEPA Region V—Harriet Croke



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

July 20, 2007

Certified Mail

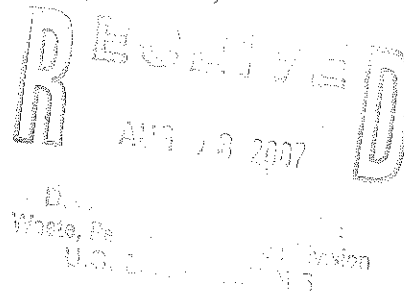
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7004 2510 0001 8617 1595

WRB Refining LLC Wood River Refinery
Attn: Eric Petersen
900 South Central Avenue
P.O. Box 76
Roxana, Illinois 62084

Shell Oil Products US
Attn: Herb Hand
910 Louisiana
OSP 688
Houston, Texas 77002

Re: 1191150002 -- Madison County
WRB Refining LLC
ILD 080 012 305
Log No. C-851-M-1 and M-2
RCRA Closure



Dear Mr. Petersen and Mr. Hand:

This letter is in response to the Closure Sampling Report and Conceptual Closure Design which was prepared by URS Corporation and dated June 2007 which was received by the Illinois EPA on June 12, 2007. This report was submitted to the Illinois EPA by Mr. Petersen on June 7, 2007. This report presented soil sampling analytical results from the hazardous waste surface impoundment referred to as Pond 1 at the above-referenced facility. The Illinois EPA is also responding to the Addendum to Pond 1 RCRA Closure which was submitted by Robert Billman of URS. This addendum was dated September 28, 2006 and received by the Illinois EPA on September 29, 2006.

A closure plan for Pond 1 was initially approved by the Illinois EPA on October 4, 2006. On May 29, 2007 the Illinois EPA approved a closure plan modification request which extended the closure deadline to December 31, 2007.

The subject submittals were handled as a closure plan modification request for Pond 1 and are hereby approved subject to the following conditions and modifications:

1. Based upon a review of the subject submittal, Illinois EPA has determined that closure of Pond 1 will be considered complete relative to soil (and thus no further action will be necessary) once an Environmental Land Use Control (ELUC) meeting the requirements of 35 Ill. Adm. Code 742 is established which ensures:
 - a. The property will only be used for industrial and commercial purposes in the future.

- b. A site safety plan to address possible work exposure to the soil will be developed and implemented during any future excavation/construction in these areas.
 - c. Any soil removed from Pond 1 during future activities will be managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
2. 35 Ill. Adm. Code 742.1010(d)(8) requires that an ELUC contain scaled maps which show information about the facility, any remaining contamination at the facility and any physical features at the facility to which the ELUC applies:
- a. The required scaled maps must specifically show:
 - (1) the legal boundary of the property to which the ELUC applies;
 - (2) the horizontal and vertical extent of contaminants of concern above applicable remediation objectives for soil to which the ELUC applies;
 - (3) any physical features to which an ELUC applies (e.g. engineered barriers, monitoring wells, caps); and
 - (4) The nature, location of the source, and direction of movement of the contaminants of concern.
 - b. Exhibit B of the model ELUC developed by Illinois EPA is comprised of the maps necessary to meet the requirements of 35 Ill. Adm. Code 742.1010(d)(8). In developing such an exhibit for an ELUC associated with an engineered barrier or industrial/commercial land use restrictions:
 - (1) If only one drawing is used to present all the required information, then it must be clearly labeled as Exhibit B to the ELUC in question. Many times however, it will be necessary to include more than one drawing in Exhibit B to meet the requirements of 35 Ill. Adm. Code 742.1010 (d)(8). In such cases, each map shall be given a unique Exhibit number (i.e. Exhibit B-1, B-2, B-3, etc.) and labeled as such.
 - (2) A cover sheet must be provided for the exhibit which: (a) lists the types of maps that must be provided in the ELUC as required in 35 Ill. Adm. Code 742.1010(d)(8); (b) identifies the map within the exhibit which addresses the individual requirements of 35 Ill. Adm. Code 742.1010(d)(8)(A), (B), (C) and (D); and (c) lists the maps which comprise the exhibit by name and number.

- (3) The Real Estate Tax Index/Parcel Index Number (PIN) of the property in question must be contained on each map in Exhibit B.
3. The Illinois EPA has determined that it can approve the request to approve closure relative to groundwater for Pond 1, contingent on the fact that institutional controls are developed in accordance with 35 Ill. Adm. Code 742, Subpart J prohibiting the use of groundwater as a potable water supply source.
4. The Illinois EPA has determined that the facility may discontinue groundwater monitoring for Pond 1.
5. All groundwater monitoring, reporting, and recordkeeping requirements of 35 Ill. Adm. Code, Part 725, Subpart F, must continue for Pond 2. In addition, the following conditions and modifications apply:
- a. The facility must continue semi-annual groundwater sampling at upgradient groundwater monitoring wells P115 and P116, and downgradient groundwater monitoring wells P110, P111, P112, P113, P114, and P117; and
- b. Groundwater samples must continue to be analyzed for the following VOCs, SVOCs, and metals:
- | <u>VOCs</u> | <u>SVOCs</u> | <u>Metals</u> |
|--------------|----------------------------|---------------|
| Benzene | Acetophenone | Barium |
| Ethylbenzene | 1- and 2-Methylnaphthalene | Chromium |
| Toluene | 2- and 3/4-Methylphenol | Zinc |
| Xylenes | Napthalene | |
| | Phenanthrene | |
| | Phenol | |
- c. At this time, Pond 2 does not appear to be impacting groundwater. However, if the facility determines that contaminants related to Pond 2 are impacting the groundwater, quarterly groundwater monitoring may be required to be resumed.
6. The next step in the closure process for Pond 1 is submittal of the draft institutional controls which will be used to meet the requirements of Conditions 1 and 3 above. These institutional controls must meet the requirements of 35 Ill. Adm. Code 742. Once these controls have been approved and properly implemented, a certification of closure and associated closure documentation report must be submitted to Illinois EPA for review and approval, as required by Illinois EPA's October 4, 2006 closure plan approval letter.

Mr. Eric Peterson and Mr. Herb Hand
Log No. C-851-M-1 and M-2
Page 4

7. Before conducting any further activities at Pond 1, Conoco-Phillips should contact the Collinsville Regional Office to make it aware of the excavation/construction efforts which will take place in the Pond 1 area.
8. Closure activities for Pond 1 must meet the requirements of: (1) 35 Ill. Adm. Code 725 and 742; and (2) Illinois EPA letters approving such activities.
9. A completed LPC PA-18 must be completed and accompany all information submitted to Illinois EPA regarding this project. To allow for the proper review of all submittals, two copies must accompany the original of all information submitted to Illinois EPA.

This letter shall constitute Illinois EPA's final action on the subject submittals. Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA. However, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal, or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Act of 1989, the Professional Geologist Licensing Act and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definition of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding the groundwater aspects of this project, please contact Amy Boley at 217/558-4716; questions regarding other aspects of this project should be directed to William T. Sinnott, II at 217/524-3310.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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cc: USEPA Region V—Harriet Croke

AMB



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397
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ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

October 4, 2006

Certified Mail

7002 2030 0001 1879 3483

7002 2030 0001 1879 3490

Conoco Phillips Wood River Refinery
Attn: Eric Petersen
900 South Central Avenue
P.O. Box 76
Roxana, Illinois 62084

Shell Oil Products US
Attn: Herb Hand
910 Louisiana
OSP 688
Houston, Texas 77002

Re: 1191150002 -- Madison County
Equilon Enterprises LLC
ILD080012305
Log No. C-851
Received: August 23, 2006
RCRA Closure

Dear Mr. Petersen and Mr. Hand:

This letter is in response to the RCRA Closure Plan submitted August 21, 2006 by Eric S. Petersen of Conoco Phillips for the hazardous waste surface impoundment referred to as Pond 1. This plan was dated August 2006 and was prepared by URS Corporation.

The plan to complete closure of the hazardous waste management unit mentioned above is hereby subject to the following conditions and modifications:

1. Eight soil sample locations were proposed to be advanced in the base of the surface impoundment at three depths below the asphalt/soil interface which include 0 to 6 inches, 1.5 feet to 2.0 feet and 4 feet to 5 feet. This effort is approved, subject to the following conditions and modifications:
 - a. A total of twelve borings at the base of the impoundment must be made to adequately characterize the soils beneath Pond 1.
 - b. According to a drawing given to the Illinois EPA during a site visit of September 1, 2006, a concrete wastewater treatment tank will be constructed in a large portion of the existing impoundment. This tank will extend approximately 13.5 feet below the base of the impoundment. Continuous samples at borings extending to the depth of bottom of the new tank may be appropriate to aid in any decision-making processes for remedial purposes. This also becomes important

as it appears that excavation of these soils will be necessary to construct the new tank.

- c. As discussed above, the base of the new tank will be 2.5 feet of concrete. In the event that the soil contamination extends to below this proposed base, this concrete base will be an adequate engineered barrier under the 35 Ill. Adm. Code 742 (TACO) to eliminate the ingestion and inhalation pathways.
2. In accordance with 35 Ill. Adm. Code 725.213(b), all activities necessary to complete closure of the subject unit must be completed within 180 days of the date of this approval letter. Illinois EPA may approve an extension of this deadline if a closure plan modification request is submitted which contains information demonstrating that: (1) the closure activities will, of necessity, take longer than 180 days to complete; and (2) the facility has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the unit including compliance with all applicable regulatory requirements.
 - a. A closure modification request for an extension of the time required to complete closure must be submitted to Illinois EPA at least 30 days prior to the expiration of the 180-day closure period.
 - b. The closure plan modification request for an extension of time required to complete closure must contain a revised schedule which identifies: (1) the various tasks which must be conducted to complete closure of the unit; (2) the estimated time frame during which the required tasks will be completed; and (3) the final date when closure is completed.
3. In accordance with 35 Ill. Adm. Code 725.215, when closure is complete a certification must be submitted to the Illinois EPA by the owner/operator and an independent professional engineer that the hazardous waste management unit at the facility has been closed in accordance with the specifications in the approved closure plan. This certification should be received at the Illinois EPA within sixty (60) days after closure. Signatures must meet the requirements of 35 Ill. Adm. Code 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity.

The Professional Engineering Practice Act (225 Illinois Compiled Statutes 325/1-325/49) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be licensed under that Act.

Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois EPA must be done by and Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with Paragraph 325/14 of the Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility in accordance with 35 Ill. Adm. Code 725.215, a Closure Documentation Report must be developed and submitted to Illinois EPA along with the closure certification statement which includes the following:

- a. Background information about the facility overall and the overall closure project.
- b. A description of the unit closed (include scaled maps showing location of unit within facility and layout of unit, information related to construction of the unit, identification of wastes managed in the unit.
- c. A chronological discussion of all closure activities and what was accomplished as a result of completing these activities.
- d. The volume of waste, waste residue and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- e. Scaled drawings showing the horizontal and vertical boundaries of the extent of any soil removal effort.
- f. A description of the method of waste handling and transport.
- g. The waste manifest numbers.
- h. Copies of waste manifests.
- i. As appropriate and available: boring logs; wells construction diagrams; geologic cross-sections; groundwater monitoring data; and information about any groundwater remediation effort.
- j. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the

activities and results associated with the sampling/analysis effort. At a minimum, this information must include:

- (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;
 - (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;
 - (8) visual classification of each soil sample in accordance with ASTM D-2488
 - (9) a summary of all procedures used for quality assurance/quality control, including the results of these procedures; and
 - (10) a discussion of the data, as it relates to the overall goal of the sampling/analysis effort.
- k. Information demonstrating that the remediation objectives approved for the project have been achieved, including the establishment of any engineered barriers or institutional controls necessary to support these objectives.
- l. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, this information must include:

- (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;
 - (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;
 - (8) visual classification of each soil sample in accordance with ASTM
 - (9) a summary of all procedures used for quality assurance/quality
 - (10) a discussion of the data, as it relates to the overall goal of the Sampling/analysis effort.
- m. Color photo documentation of closure. Document conditions before, during and after closure.
4. Closure efforts at this facility must meet the requirements of 35 Ill. Adm. Code 725, Subpart G. Any variation to the closure activities approved by this letter shall be the Subject of a request to modify the approved closure plan which is submitted to the Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit. In addition, this request must contain information demonstrating that the proposed modifications that the proposed modifications meet the requirements of 35 Ill. Adm. Code, Subtitle G: Waste Disposal. A revised schedule for completing the various tasks necessary to complete closure must

be included in this request. (Finally, if the proposed modifications will require the closure project to take more than 180 days to complete, then it will be necessary for this modification request to also contain the information identified in Condition in support of extension requests.)

5. All references to the "Illinois EPA's RCRA closure plan instructions" refer to the document entitled Guidance for Preparing RCRA Closure Plans (July 2003). A copy of this document is available on Illinois EPA's internet site.
6. All references to "SW-846" refer to the USEPA document entitled Test Methods for Evaluating Solid Wastes, Third Edition and any finalized updates.
7. The proposed soil sampling/analysis effort within Pond 1 shall be carried out in accordance with the procedures set forth in the plan and this letter. The following procedures must be utilized in the collection of all soil samples:
 - (a) Collection of all soil samples must be carried out in accordance with ASTM or SW-846 procedures. Acceptable ASTM procedures include:
 - (1) Method D-4700-91 (Method for Soil Sampling from the Vadose Zone);
 - (2) Method D 6001-96 (Guide for Direct-Push Sampling for Geoenvironmental Investigations); and
 - (3) Method 6169-97 (Guide for Selection of Soil and Rock Sampling Devices used with Drill Rigs for Environmental Investigations).
 - (b) Soil samples collected for volatile organic compounds (VOCs) analysis require specialized sampling and handling procedures, as specified in Attachment A of Illinois EPA's RCRA closure plan guidance document or Method 5035 of SW 846.
 - (c) All soil encountered during the sampling effort must be classified in accordance with ASTM D-2488.
 - (d) Soil samples must be continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.

- (e) Horizontal/vertical locations where samples are collected must be biased, as appropriate, to stained/discolored areas or areas where contamination is suspected to be present (such as the highest field screening results).
 - (f) Soil which is encountered in an area where VOC contamination is a concern must be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory must not be field screened.
7. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts.
 8. All soil samples shall be analyzed individually (i.e. no compositing). Analytical Procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes (SW-846), Third Edition and Finalized Updates. When a SW-846 analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Illinois EPA. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.
 9. The last paragraph on page ES-1 of this plan states, "Shell has already addressed the potential contribution of Pond 1 to groundwater contamination in the Alternate Source Demonstration (ASD) submitted to USEPA on August 11, 1993. That document concluded that Pond 1 does not contribute to groundwater contamination."

It does not appear that the referenced report was approved by USEPA. In addition, it is more than thirteen years old and there could have been releases from Pond 1 to groundwater since the time it was written. To properly close the subject unit, the closure plan should have included a detailed description of the groundwater monitoring program for this unit, the results of this program since it was implemented in 1990 and a proposal for monitoring the groundwater as part of closure of this unit. Thus, an addendum to this plan must be submitted by January 1, 2007 which contains this information. Guidance for the development of this submittal can be found in Illinois EPA's RCRA closure plan guidance document. It must be noted that if it found that Pond 1 is adversely impacting groundwater, then it will be necessary to properly remediate the associated contamination.

10. The first paragraph in Section 4.1 states in part, "The groundwater ingestion pathway will not be considered in this plan because ConocoPhillips has already addressed the potential contribution of Pond 1 to groundwater contamination in the Alternate Source Demonstration (August 11, 1993). That document concluded that Pond 1 does not contribute to groundwater contamination. Additionally, there is an ongoing groundwater-

monitoring program in place as part of the Wood River Refinery's interim status. That program has historically shown that constituent levels in the groundwater are below the screening levels.

- a. The groundwater ingestion route must be considered in developing soil and groundwater remediation objectives for this closure project. The procedures set forth in 35 Ill. Admin. Code 742 must be met in developing objectives for this exposure route.
 - b. As indicated above, the Alternate Source Demonstration does not appear to have been approved by USEPA and is some thirteen years old. Releases from the pond since that time could have adversely impacted groundwater at the facility. Thus, as also indicated above, a groundwater monitoring program must be developed and implemented as part of closure of this impoundment. As indicated above, remediation objectives developed in accordance with 35 Ill. Admin. Code 620 and 742 must eventually be met in closing this unit.
11. Soil and groundwater remediation objectives (ROs) for RCRA closure projects must be developed in accordance with 35 Ill. Adm. Code 742. Guidance for the development of soil ROs for RCRA remediation projects can be found on Illinois EPA's internet site (www.epa.state.il.us).
- a. Proposed soil and groundwater ROs must be approved by Illinois EPA prior to being used. Such submittals must contain detailed information demonstrating that these objectives were developed in accordance with TACO including:
 - (1) An identification of the constituents of concern, justification for their selection, and information depicting the extent of contamination;
 - (2) An identification of the option used to develop the RO;
 - (3) An identification of all the requirements associated with the option and demonstration that all these requirements are met;
 - (4) All calculations and input data used in developing the ROs, including information documenting the source and procedures used to obtain the input data.
 - b. Any engineered barrier or institutional control used to support the development of ROs must be approved by Illinois EPA prior being used. Submittals for such approval must include:

- (1) For engineered barriers, a detailed description of the barrier, including plan sheets, identifying the construction details and the boundaries of the barrier;
- (2) For institutional controls, a proposed document which has been developed in accordance with 35 Ill. Adm. Code 742, Subpart J. It must be noted that the Illinois EPA's inter site (www.epa.state.il.us) contains guidance regarding proposed institutional controls, including a model environmental land use control.

A detailed description of how the proposed engineered barrier or institutional control meets the applicable regulatory requirements must also be included in this submittal.

- c. Remedial action must be taken, as appropriate, to ensure the approved ROs are met at the units undergoing closure. Detailed plans and specifications for executing these remedial actions must be approved by Illinois EPA prior to their being implemented.
 - d. If overall closure/remediation efforts of the unit cannot meet these soil objectives, then it will be necessary to close the unit as a landfill in accordance with 35 Ill. Adm. Code 725, Subpart G. In such a case, it will also be necessary to provide at least 30 years of post-closure care for the unit closed as a landfill and eventually obtain a RCRA permit for the facility. Such post-closure care activities must meet the requirements of 35 Ill. Adm. Code 724, Subpart G and 725, Subpart G.
12. All waste generated as part of this project must be managed in accordance with the requirements of 35 Ill. Adm. Code 721, 722, 723, 728, 808 and 809.
 13. All hazardous waste generated during this project is subject to annual reporting as required by 35 Ill. Adm. Code 722.131. A report must be submitted to the Illinois EPA by March 1 of the following year for wastes generated during a calendar year and: (a) treated and left on site; or (b) shipped off-site for storage, treatment and/or disposal. Additional information and appropriate forms can be obtained from:

Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

14. All non-hazardous special waste generated during this project that are shipped to a facility located outside the State of Illinois are subject to annual reporting as required by Section 22.01 of the Illinois Environmental Protection Act and 35 Ill. Adm. Code 809.601(g) and shall be reported to the Illinois EPA by February 1 of the following year. Additional information and appropriate forms can be obtained from:

Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

15. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Cod 725.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
16. Under the provisions of 29 CFR 1910, cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off-site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup must have at least an additional eight hours of specialized training on managing hazardous waste operations.
17. The enclosed form entitled RCRA Interim Status Closure and Post-Closure Care Plans General Form (LPC-PA18) must be completed and accompany all information submitted to the Illinois EPA associated with the closure activities described in this letter. As noted on this form, two copies must accompany the original of all submittals, so that the information submitted can be distributed, as necessary to Illinois EPA personnel and regional offices.
18. A report documenting the results of the approved soil investigation and a plan for further closure efforts must be submitted to Illinois EPA within ninety days after the results of the investigation are received. This submittal should be developed in accordance with Illinois EPA's RCRA closure plan guidance document.

Mr. Petersen and Mr. Hand
C-851
Page 11

Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA. However, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal, or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definition of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding this letter, please contact William T. Sinnott, II at 217/524-3310.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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JKM TBM

cc: USEPA Region V—Harriet Croke



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

August 18, 2006

Certified Mail

7004 2510 0001 8593 4566

7004 2510 0001 8593 4573

Conoco Phillips Wood River Refinery
Attn: Eric Petersen
900 South Central Avenue
P.O. Box 76
Roxana, Illinois 62084

Shell Oil Products US
Attn: Herb Hand
910 Louisiana
OSP 688
Houston, Texas 77002

Re: 1191150002 - Macoupin County
Equilon Enterprises LLC
ILD080012305
Log No. B-43-CA-1 and 2
Received: August 17, 2005, August 18, 2005
RCRA Permit

Dear Mr. Petersen and Mr. Hand:

This is in response to Mr. Petersen's August 15, 2005 submittals regarding proposed closure activities for two former hazardous waste management units (the CATCO Drum Storage Building and Tank CH-290) at the above-referenced facility. The plan to complete closure of the hazardous waste management unit(s) mentioned above is hereby approved subject to the following conditions and modifications:

1. In accordance with 35 Ill. Adm. Code 724.213(b), all activities necessary to complete closure of the subject unit(s) must be completed within 180 days of the date of this approval letter. Illinois EPA may approve an extension of this deadline if a closure plan modification request is submitted which contains information demonstrating that: (1) the closure activities will, of necessity, take longer than 180 days to complete; and (2) the facility has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the unit(s), including compliance with all applicable regulatory requirements.
 - a. A closure modification request for an extension of the time required to complete closure must be submitted to Illinois EPA at least 30 days prior to the expiration of the 180-day closure period.
 - b. The closure plan modification request for an extension of the time required to complete closure must contain a revised schedule which identifies: (1) the various

tasks which must be conducted to complete closure of the unit(s); (2) the estimated time frame during which the required tasks will be completed; and (3) the final date when closure will be completed.

2. In accordance with 35 Ill. Adm. Code 724.215, when closure is complete a certification must be submitted to Illinois EPA by the owner/operator and an independent professional engineer that the hazardous waste management units at the facility have been closed in accordance with the specifications in the approved closure plan. This certification should be received at the Illinois EPA within sixty (60) days after closure.

An effort is being made to complete the enclosed closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity.

The Professional Engineering Practice Act (225 Illinois Compiled Statutes 325/1-325/49) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be licensed under that Act. Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with Paragraph 325/14 of the Professional Engineering Practice Act.

As part of the closure certification, to document the closure activities at your facility in accordance with 35 Ill. Adm. Code 725.215, a Closure Documentation Report must be developed and submitted to Illinois EPA along with the closure certification statement which includes the following:

- a. Background information about the facility overall and the overall closure project.
- b. A description of the unit(s) closed (include scaled maps showing location of unit(s) within facility and layout of unit(s), information related to construction of the unit(s), identification of wastes managed in the unit(s)).

- c. A chronological discussion of all closure activities and what was accomplished as a result of completing these activities.
- d. The volume of waste, waste residue and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- e. Scaled drawings showing the horizontal and vertical boundaries of the extent of any soil removal effort.
- f. A description of the method of waste handling and transport.
- g. The waste manifest numbers.
- h. Copies of the waste manifests.
- i. As appropriate and available: boring logs; well construction diagrams; geologic cross-sections groundwater monitoring data; and information about any groundwater remediation effort.
- j. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, this information must include:
 - (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;

- (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;
 - (8) visual classification of each soil sample in accordance with ASTM D-2488;
 - (9) a summary of all procedures used for quality assurance/quality control, including the results of these procedures; and
 - (10) a discussion of the data, as it relates to the overall goal of the sampling/analysis effort.
- k. Information demonstrating that the remediation objectives approved for the project have been achieved, including establishment of any engineered barriers or institutional controls necessary to support these objectives.
- l. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, this information must include:
- (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;

- (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;
 - (8) visual classification of each soil sample in accordance with ASTM D-2488;
 - (9) a summary of all procedures used for quality assurance/quality control, including the results of these procedures; and
 - (10) a discussion of the data, as it relates to the overall goal of the sampling/analysis effort.
- m. Color photo documentation of closure. Document conditions before, during and after closure.
3. Closure efforts at this facility must meet the requirements of 35 Ill. Adm. Code 724, Subpart G. Any variation to the closure activities approved by this letter shall be the subject of a request to modify the approved closure plan which is submitted to Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit(s). In addition, this request must contain information demonstrating that the proposed modifications meet the requirements of 35 Ill. Adm. Code, Subtitle G: Waste Disposal. A revised schedule for completing the various tasks necessary to complete closure must be included in this request. (Finally, if the proposed modifications will require the closure project to take more than 180 days to complete, then it will be necessary for this modification request to also contain the information identified in Condition in support of extension requests.)
4. All references to the "Illinois EPA's RCRA closure plan instructions" refer to the document entitled Guidance for Preparing RCRA Closure Plans (July 2003). A copy of this document is available on Illinois EPA's internet site.
5. All references to "SW-846" refer to the USEPA document entitled Test Methods for Evaluating Solid Wastes, Third Edition and any finalized updates.

6. The concrete surfaces of the CATCO Building shall be visually inspected, photographed and any residue adhering to the surface must be removed by scraping and/or brushing. Following this, the concrete surfaces must be steam cleaned and triple rinsed. All wash and rinse water shall be collected and managed in accordance with the requirements of (1) 35 Ill. Adm. Code, Subtitle G: Waste Disposal; and/or (2) 35 Ill. Adm. Code, Subtitle C: Water Pollution.
7. The decontamination effort described in Condition 6 above must also be conducted on Tank CH-290, its secondary containment system, and its appurtenances.
8. The proposed soil sampling/analysis effort within the CATCO building shall be carried out in accordance with the procedures set forth in the plan and this letter. The following procedures must be utilized in the collection of all soil samples:
 - a. Collection of all soil samples must be carried out in accordance with ASTM or SW-846 procedures. Acceptable ASTM procedures include:
 - (1) Method D 4700-91 (Method for Soil Sampling from the Vadose Zone);
 - (2) Method D 6001-96 (Guide for Direct-Push Sampling for Geoenvironmental Investigations); and
 - (3) Method 6169-97 (Guide for Selection of Soil and Rock Sampling Devices Used with Drill Rigs for Environmental Investigations).
 - b. Soil samples collected for volatile organic compound (VOCs) analysis require specialized sampling and handling procedures, as specified in Attachment A of Illinois EPA's RCRA closure plan guidance document or Method 5035 of SW-846.
 - c. All soil encountered during the sampling effort must be field classified in accordance with ASTM D-2488.
 - d. Soil samples must be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.
 - e. Horizontal/vertical locations where samples are collected must be biased, as appropriate, to stained/discolored areas or areas where contamination is suspected to be present (such as the highest field screening results).

- f. Soil which is encountered in an area where VOC contamination is a concern must be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory must not be field-screened.
9. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts.
10. All soil samples shall be analyzed individually (i.e., no compositing). Analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes (SW-846), Third Edition and Finalized Updates. When a SW-846 analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Illinois EPA. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed.
11. If contaminated soil is encountered during any required soil sampling/analysis effort, then a sufficient number of additional samples should be collected and analyzed to clearly determine the horizontal and vertical limits of the soil which exceed the established remediation objectives in and around the CATCO building. The procedures used to collect and analyze these samples must be in accordance with those approved by this letter. The procedures used for determining the horizontal and vertical locations from which these samples must be collected shall be in accordance with Sections 2.4.5 of the Illinois EPA's RCRA closure plan instructions (July 2003). However, no random sampling shall be used to make this determination.
12. If groundwater is encountered during any soil sampling activities or soil removal effort prior to reaching soil which meets the remediation objectives, then a plan to investigate for potential groundwater contamination must be submitted to the Illinois EPA for review and approval. Such a plan must be submitted within sixty (60) days after the date that the analytical results are received which indicate that soil contamination extends to the water table. In addition, the Illinois EPA shall be notified in writing of this discovery within five (5) days after these analytical results are received.
13. Soil and groundwater remediation objectives (ROs) for RCRA closure projects must be developed in accordance with 35 Ill. Adm. Code 742. Guidance for the development of soil ROs for RCRA remediation projects can be found on Illinois EPA's internet site (www.epa.state.il.us).

- a. Proposed soil and groundwater ROs must be approved by Illinois EPA prior to being used. Such submittals must contain detailed information demonstrating that these objectives were developed in accordance with TACO including:
 - (1) An identification of the constituents of concern, justification for their selection, and information depicting the extent of contamination;
 - (2) An identification of the option used to develop the RO;
 - (3) An identification of all the requirements associated with the option chosen and demonstration that all these requirements are met;
 - (4) All calculations and input data used in developing the ROs, including information documenting the source and procedures used to obtain the input data.
- b. Any engineered barrier or institutional control used to support the development of ROs must be approved by Illinois EPA prior to being used. Submittals for such approval must include
 - (1) For engineered barriers, a detailed description of the barrier, including plan sheets, identifying the construction details and boundaries of the barrier;
 - (2) For institutional controls, a proposed document which has been developed in accordance with 35 Ill. Adm. Code 742, Subpart J. It must be noted that the Illinois EPA's internet site (www.epa.state.il.us) contains guidance regarding proposed institutional controls, including a model environmental land use control.

•

A detailed description of how the proposed engineered barrier or institutional control meets the applicable regulatory requirements must also be included in this submittal.
- c. Remedial action must be taken, as appropriate, to ensure the approved ROs are met at the units undergoing closure. Detailed plans and specifications for executing these remedial actions must be approved by Illinois EPA prior to their being implemented.

- d. If overall closure/remediation efforts of the unit(s) cannot meet these soil objectives, then it will be necessary to closure the unit(s) as landfills in accordance with 35 Ill. Adm. Code 725, Subpart G. In such a case, it will also be necessary to provide at least 30 years of post-closure care for the unit closed as a landfill and eventually obtain a RCRA permit for the facility. Such post-closure care activities must meet the requirements of 35 Ill. Adm. Code 724, Subpart G and 725, Subpart G.
14. All waste generated as part of this project must be managed in accordance with the requirements of 35 Ill. Adm. Code 721, 722, 723, 728, 808 and 809.
15. All hazardous waste generated during this project is subject to annual reporting as required by 35 Ill. Admin. Code 722.141. A report must be submitted to the Illinois EPA by March 1 of the following year for wastes generated during a calendar year and: (a) treated and left on-site; or (b) shipped off-site for storage, treatment and/or disposal. Additional information and appropriate report forms can be obtained from:

Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

16. All non-hazardous special waste generated during this project that are shipped to a facility located outside the State of Illinois are subject to annual reporting as required by Section 22.01 of the Illinois Environmental Protection Act and 35 Ill. Admin. Code 809.601(g) and shall be reported to Illinois EPA by February 1 of the following year. Additional information and appropriate report forms can be obtained from:

Waste Reduction and Compliance Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

17. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 725.211, the Illinois EPA reserves the right to amend

the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.

18. Under the provisions of 29 CFR 1910, cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
19. The enclosed form entitled RCRA Interim Status Closure and Post-Closure Care Plans General Form (LPC-PA18) must be completed and accompany all information submitted to the Illinois EPA associated with the closure activities described in this letter. As noted on this form, two copies must accompany the original of all submittals, so that the information submitted can be distributed, as necessary to Illinois EPA personnel and regional offices.

This action shall constitute Illinois EPA's final action on the subject submittal. Within 35 days after the date of mailing of Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal(s) or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Mr. Petersen and Mr. Hand
Log No. B-43-CA-1 and 2
Page 11

Should you have any questions regarding this matter, please contact James K. Moore, P.E. at 217/524-3295.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen F. Nightingale", with a stylized flourish at the end.

Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

SFN:JMK:bjh\061679s.doc

JEM

Enclosures: Closure Certification Statement
LPC PA-18

cc: USEPA Region V -- Harriet Croke